

REMARKS

Claims 1 and 28-33 are pending in the present application. Claim 28 has been amended to clarify features already present in Claim 28. Applicant respectfully request entry of the amendment to Claim 28 to place Claim 28 in better condition for appeal.

Election/Restrictions

Applicant disagrees that the Species identified are mutually exclusive as indicated by the Examiner. Enclosed is a copy of the petition filed herewith in that regard. Applicant respectfully request further examination on the merits with respect to Claims 2-19 and 34-43, which were the subject of an improper restriction requirement.

Claim Rejections pursuant to 35 U.S.C. §102(b)

Claim 1 stands rejected pursuant to 35 U.S.C. §102(b) as being anticipated by European Patent Publication EP 0369434 (herein after referred to as EP '434). In addition, Claims 1, 28, 30 and 31 stand rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Japanese Patent Publication JP 5-85196 (hereinafter referred to as "JP '196"). Applicant respectfully traverses these rejections because the cited prior art does not teach all of the limitations of the Claims.

Claim 1

Claim 1 is directed to a method of making a woven spider that includes weaving a wrapped thread at a selected location in the cloth to serve as part of the weave of the cloth. Conversely, Figure 7C of EP '434 clearly teaches a flat net shaped woven wire (20) that is on a damper (1). EP '434 also specifically teaches that the flat net shaped woven wire "is molded to be *adhered to* the damper." (Col. 7 lines 32-36) (emphasis Applicant's) Further, EP '434

specifically describes with reference to Figs. 7A, 7B and 7C(sic) "a damper to which the plain weave woven wire is mounted." If something is adhered to a spider or mounted on a spider as taught in EP '434, it cannot possibly be weaved at a selected location in the cloth from which the spider is to be woven as described in Claim 1. In addition, something that is illustrated and described as mounted on top of a spider as depicted in Fig. 7C of EP '434 and adhered to the spider as taught by EP '434 cannot possibly serve as part of the weave of a cloth as described in Claim 1. Accordingly, EP '434 fails to teach each and every limitation described in Claim 1.

Claim 1 also describes selecting a thread of cloth from which the spider is to be woven and wrapping an electrical conductor around the thread. In sharp contrast, JP '196 teaches "flat knit gold threads" that are soldered at one end to a coil bobbin and connected an input terminal at the other end. (JP '196 translation paragraph 11 pgs. 14 and 15) The flat knit gold threads are woven into a damper made of cloth. (JP '196 translation paragraph 11 pgs. 14 and 15) Sound signals are input to a tweeter and a voice coil of a woofer through the gold threads. (JP '196 translation paragraphs 23 and 24 pages 18-19) JP '196 also teaches that a warp (S1) and weft (S2) are woven into a cloth and the flat knit gold threads are woven into the cloth. (FIG. 6, JP '196 translation paragraph 36 pg. 22 and paragraph 48 pg. 26) Clearly, all of the flat knit gold threads of JP '196 are electrical conductors and are not a thread of cloth from which a spider is to be woven as described in Claim 1.

For at least the foregoing reasons, neither EP '434 nor JP '196 teach each and every limitation described in Claim 1. Accordingly, Claim 1 is patentably distinct over the cited prior art and Applicant respectfully requests removal of the 25 USC §102(b) rejection of Claim 1.

Claim 28

Amended Claim 28 is directed to a method of making a woven spider. The method includes weaving a selected non-conducting thread that is wrapped with an electrical conductor into a woven cloth to form a single shed or course of the woven cloth that forms the woven spider. As previously discussed, EP '434 teaches that flat net shaped woven wire is mounted on a woven cloth and adhered to the woven cloth. Something that is mounted on a woven cloth cannot possibly be woven into a woven cloth, as is the non-conducting thread wrapped with an electrical conductor that is described in Claim 28. In addition, such a mounted object cannot possibly be woven into a woven cloth, to form a single shed or course of the woven cloth that forms a woven spider as also described in Claim 28.

Claim 28 also describes helically wrapping an electrical conductor around a selected non-conducting thread. Clearly, JP '196 fails to teach helically wrapping an electrical conductor around a non-conducting thread as described in Claim 28. Conversely, JP '196, teaches a plurality of gold threads that are knitted together to form an electrical conductor to carry audio signals. JP '196 also teaches that the gold threads are soldered to input terminals and a coil bobbin of a loudspeaker. Clearly a non-conducting thread cannot carry audio signals and cannot be soldered. In addition, in Claim 28, two specific and distinct limitations are described: a non-conducting thread and an electrical conductor. JP '196, on the other hand describes identical knit gold threads. A non-conducting thread and an electrical conductor as described in Claim 28 are not equivalent to identical gold threads.

Claim Rejections pursuant to 35 U.S.C. §103(a)

Claims 1, 28, 30, 31 and 32 also stand rejected pursuant to 35 U.S.C. §103(a) as being obvious in view of JP '196 and further in view of U.S. Patent No. 5,091,958 to Sakamoto et al. (herein after referred to as Sakamoto). In addition, Claim 29 is rejected pursuant to 35 U.S.C. §103(a) as being obvious in view of JP '196, Sakamoto and EP '434. Further, Claim 33 stands rejected pursuant to 35 U.S.C. §103(a) as being obvious in view of JP '196, Sakamoto and U.S. Patent No. 3,841,952 to Kimura et al. (hereafter "Kimura"). Applicant respectfully traverses these rejections because the cited prior art does not teach all of the limitations of the pending Claims.

As previously discussed, JP '196 does not teach wrapping an electrical conductor around a selected thread as described in Claim 1, nor does JP '196 teach helically wrapping an electrical conductor around a selected non-conducting thread as described in Claim 28. In the office action, it has been asserted that Sakamoto teaches these limitations. However, in Col. 3 lines 3-6, Sakamoto teaches "two tinsel cords woven flat and serving as conductors 2 are sewn in parallel into the damper raw material."

Applicant readily acknowledges that Sakamoto teaches electrical conductors, however, Applicant was unable to identify any teaching in Sakamoto that referred to wrapping an electrical conductor around a thread of cloth from which a spider is to be woven as described in Claim 1. In addition, Applicant was unable to identify any teaching in Sakamoto that referred to helically wrapping an electrical conductor around a selected non-conducting thread as described in Claim 28. In addition, as depicted in Figures 1, 2A, 3, 6 and 9-15 the conductors (2) of Sakamoto are clearly mounted on top of the damper (1) similar to EP '434 and as described in the background section of Applicant's specification.


With regard to Claim 33, Applicant readily agrees that the cream solder taught by JP '196 is a conductive adhesive. JP '196 also teaches that an outer periphery of a dustproof damper is attached by adhesives to the cone as illustrated in Fig. 1 of JP '196. (JP '196 pg. 27 paragraph 52) In addition, JP '196 teaches that the outer periphery of a coil bobbin is attached to the inner periphery of the dustproof damper with adhesives. (JP '196 pg. 25 paragraph 45) Further, JP '196 teaches that the inner periphery of the dustproof damper is attached with adhesive to the outer periphery of the coil bobbin after flat knit gold threads are soldered on to the coil bobbin. (JP '196 pgs. 24-25 bridging paragraphs 44 and 45)

However, what JP '196, Kimura and/or Sakamoto fails to teach, suggest or disclose is applying a non-conductive adhesive between a woven spider and a coil former before a conductive adhesive has cured to cover the conductive adhesive and join the woven spider and the coil former as described in Claim 33. In the official action, it has apparently been asserted that JP '196 teaches that an adhesive is used to bond the woven spider to the coil former, "which would be prior to the solder being hardened or cured." Applicant respectfully traverses that JP '196, Kimura and/or Sakamoto teaches, suggests, or discloses application of a non-conductive adhesive before a conductive adhesive has cured as described in Claim 33 since there is no support for such an assertion in any of the cited references.

For at least the foregoing reasons, all of the claim features provided in Claims 1, 28 and 33 are not taught or suggested by the cited combination of the prior art. Thus, a *prima facie* case of obviousness has not been established for Claims 1, 28 and 33. In addition, Claims 28-33 depend from independent Claim 28 and are therefore allowable for at least the same reasons. Thus, Applicant respectfully requests the removal of the 35 U.S.C. §103(a) rejection of Claims 1 and 28-33.

so find and issue a Notice of Allowance in due course. Should the Examiner deem a telephone conference to be beneficial in expediting examination and/or allowance of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,



Sanders N. Hillis
Attorney Reg. No. 45,712

SNH/bal

BRINKS HOFER GILSON & LIONE

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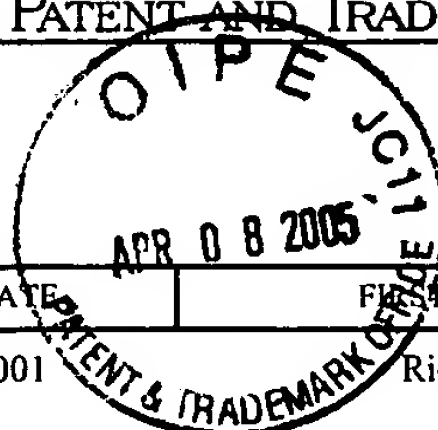
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,231	06/19/2001	Richard E. Auerbach	1039-68477	5169

23643 7590 05/20/2003

BARNES & THORNBURG
11 SOUTH MERIDIAN
INDIANAPOLIS, IN 46204

EXAMINER

TUGBANG, ANTHONY D

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ART UNIT	PAPER NUMBER
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3729

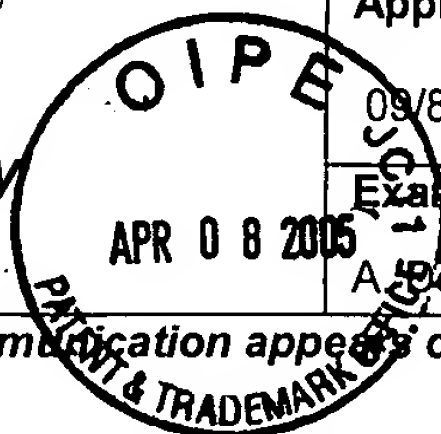
MAY 27 2003

DATE MAILED: 05/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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JUN 10 2003
BRINKS, HOFER,
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Office Action Summary

Application No.

09/884,231

Examiner

A. Dexter Tugbang

Applicant(s)

AUERBACH ET AL.

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3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21,23 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) 20,21,23,29,31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,18,19,28,30 and 33 is/are rejected.
- 7) ☒ Claim(s) 6-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

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JUN 10 2003

BRINKS, HOFER,
GILSON & LIONF**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/19/03 has been entered.

Election/Restrictions

2. Claims 20, 21 and 23 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

3. Newly submitted Claims 29, 31 and 32 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the features of leaving a determined length of the selected thread that is wrapped with the electrical conductor positioned adjacent to the woven cloth in a determined position so that the selected thread that is wrapped with the electrical conductor extends beyond an edge of the woven cloth with the woven cloth is molded and trimmed to a desired shape to form the woven spider (as required per Claim 29); positioning the selected thread wrapped with the electrical conductor so that the thread with the conductor is a flex locus (as required per Claim 31); and leaving a determined length of the thread that is wrapped with the electrical conductor unwoven and trimming the woven cloth to create a central opening and a desired outer circumference of the woven cloth (as required by

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Claim 32); are all features that were not originally claimed and are independent and distinct from the invention originally claimed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims 29, 31 and 32 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 18, 28, 30 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Publication, EP 0 479 317, referred to hereinafter as EP'317.

Regarding Claims 1 and 28, EP'317 discloses a method of making a moving coil transducer comprising: selecting a thread H of a cloth 1F from which the spider is to be woven; helically wrapping an electrical conductor 2H around the selected thread H; and weaving the wrapped thread in the cloth (shown in Fig. 9).

Regarding Claims 2 and 18, EP'317 suggests that the cloth is formed into a spider (damper assembly), which is incorporated into a moving coil transducer or loudspeaker assembly (see Fig. 6) with the electrical conductor wrapped around the thread making electrical contact by

applying a conductive adhesive of solder to at least one of the wrapped electrical conductors and leads or terminals (see col. 6, lines 38-45).

Regarding Claim 3, the claimed "float" is read as the portions of the wrapped thread 2c exposed above or overshooting the cloth (shown in Fig. 9).

Regarding Claim 30, the weaving step of EP'317 is considered to be an "integral part" of the woven cloth that is only the selected wrapped thread with the electrical conductor (shown in Fig. 6).

Regarding Claim 33, EP'317 further teaches electrically coupling the electrical conductor to a voice coil wire (terminals) with a conductor adhesive (solder) and applying a non-conductive adhesive (molded resin) between the woven spider and coil former (loudspeaker unit not shown) to cover the conductive adhesive and join the woven spider and the coil former (see col. 3, lines 35+).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP'317 in view of European Patent Publication EP 0 369 434, referred to hereinafter as EP'434.

EP'317 discloses the claimed manufacturing method as previously discussed further including applying a conductor adhesive, i.e. solder (as required per Claim 19).

EP'317 does not teach wrapping multiple threads with multiple electrical conductors, twisting the multiple wrapped threads together, and subsequently weaving the multiple wrapped threads at a single shed or course in the cloth.

EP'434 teaches a transducer manufacturing process, which includes wrapping multiple threads with multiple electrical conductors, twisting the multiple wrapped threads together, and subsequently weaving the multiple wrapped threads at a single shed or course in the cloth (shown in Figures 7A and 7B). The benefits of the above process include preventing cracks in the multiple wrapped conductors (see col. 5, lines 8-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of EP'317 by including the transducer manufacturing process of EP'434, to advantageously prevent cracks in the multiple wrapped conductors and the moving coil transducer.

Response to Arguments

8. Applicant's arguments filed 3/19/03 (Paper No. 15) have been fully considered but have not been deemed to be found as persuasive.

In regards to the merits of EP'317, the applicants' contend that EP'317 does not teach wrapping an electrical conductor around a thread.

The examiner traverses in that EP'317 shows wrapping an electrical conductor 2H around a thread H in Figure 5 and that this wrapped thread is clearly weaved into a cloth as shown in Figure 6. Thus, EP'317 fully satisfies these limitations.

Allowable Subject Matter

9. Claims 6-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599.

The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

May 19, 2003



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,231	06/19/2001	Richard E. Auerbach	1039-68477	5169

27879 7590 11/18/2003

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EXAMINER

TUGBANG, ANTHONY D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 11/18/2003

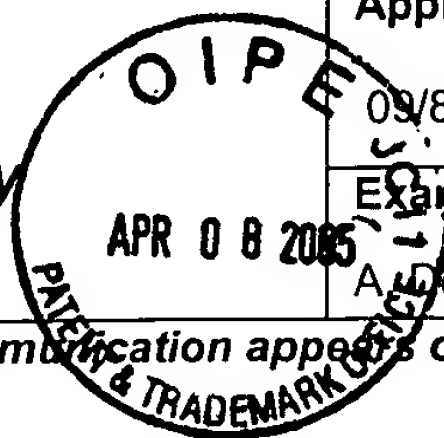


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BRINKS, HOFER,
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Office Action Summary

Application No.

09/884,231

Applicant(s)

AUERBACH ET AL.

Examiner

A. Dexter Tugbang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) 20, 21 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 18, 19 and 28-33 is/are rejected.
- 7) ☒ Claim(s) 6-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

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GILSON & LONE**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 3-6 of the Request for Reconsideration, filed 8/20/03, with respect to Claims 1-3, 18, 28, 30 and 33 have been fully considered and are persuasive. The rejections in the previous Office Action (Paper No. 17) directed to EP'317 have been withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Claims 20, 21 and 23 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.
4. The applicants' arguments (see pages 2-3 of the Request for Reconsideration) regarding Claims 29, 31 and 32 as to the claims being distinct and independent from the invention originally claimed, have been found to be persuasive. Therefore, the claims will be fully examined on their merits.

Claim Rejections - 35 USC § 102

5. Claims 1 and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent EP 0 369 434, referred to hereinafter as EP'434.

EP'434 discloses a method of making a woven spider comprising: selecting a thread (anyone of fibers 11 in Fig. 7A) of a cloth; helically wrapping multiple electrical conductors 12a,

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12b around the thread (see Fig. 7A); and weaving the wrapped thread at a selected location in the cloth (see Fig. 7C), which meets all of the limitations of the claimed invention.

Regarding Claim 29 in Figs. 8A and 8B, EP'434 shows the woven cloth being molded and trimmed to the dimensions of D and W with the wrapped conductor extending beyond and edge of the woven cloth (see Fig. 7C).

Regarding Claims 30 and 31, the wrapped conductor is an integral part of the woven cloth only at the conductor portion and is considered to be a flex locus (see Fig. 8B) of the cloth.

Claim Rejections - 35 USC § 103

6. Claims 2-4, 18, 19, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP'434 in view of Japanese Patent Publication JP 5-85196, referred to hereinafter as JP'196.

EP'434 discloses the claimed manufacturing method as relied upon above, and further including forming the cloth into a spider of a loudspeaker and the use of a non-conductive adhesive of resin (see col. 6, lines 27+).

EP'434 teaches substantially all of the limitations of the claimed manufacturing method except incorporating the spider into a moving coil transducer and making electrical contact to a moving coil of the moving coil transducer by applying a conductive adhesive.

JP'196 discloses (note the Full English Translation) incorporating an equivalent spider into a moving coil transducer and making electrical contact to a moving coil of the moving coil transducer by the use of a conductive adhesive, i.e. solder, to assemble a loudspeaker.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of EP'434 by incorporating the spider into a moving coil transducer and making electrical contact to a moving coil of the moving coil transducer by applying a conductive adhesive, as taught by JP'196, to positively assemble art recognized equivalent spiders into a moving coil transducer or loudspeaker assembly.

Regarding Claim 32, the examiner takes Official Notice that shaping woven cloths by trimming to form the outer circumference and a central opening is notoriously well known in the art of manufacturing cloths. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified either of the cloths of EP'434 or JP'196 by trimming the cloths for the advantages of achieving a particular shape and opening of the cloth.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP'434 in view of JP'196 as applied to claims 2-4 above, and further in view of Barbera 5,110,999.

EP'434, as modified by JP'196, teaches the claimed manufacturing method as previously discussed. The modified EP'434 method does not mention twisting the wrapped threads together.

Barbera shows twisting wrapped threads together to increase mechanical integrity and withstand any wear (see col. 5, lines 30-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of EP'434 by twisting the wrapped threads, as taught by Barbera, to positively increase mechanical integrity and withstand wear.

Allowable Subject Matter

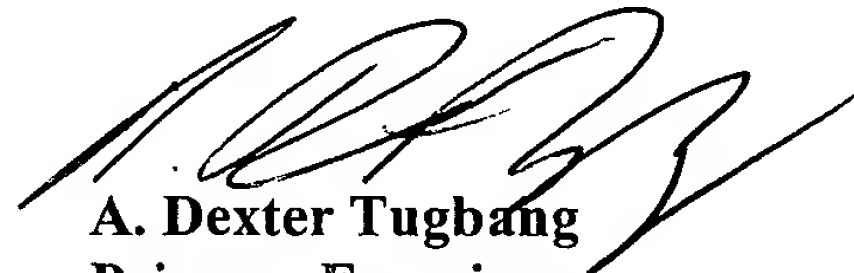
8. Claims 6-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.


A. Dexter Tugbang
Primary Examiner
Art Unit 3729

November 17, 2003



UNITED STATES PATENT AND TRADEMARK OFFICE



11332/431

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,231	06/19/2001	Richard E. Auerbach	1039-68477	5169

27879 7590 07/27/2004
INDIANAPOLIS OFFICE 27879
BRINKS HOFER GILSON & LIONE
ONE INDIANA SQUARE, SUITE 1600
INDIANAPOLIS, IN 46204-2033

EXAMINER

TUGBANG, ANTHONY D

ART UNIT PAPER NUMBER

3729

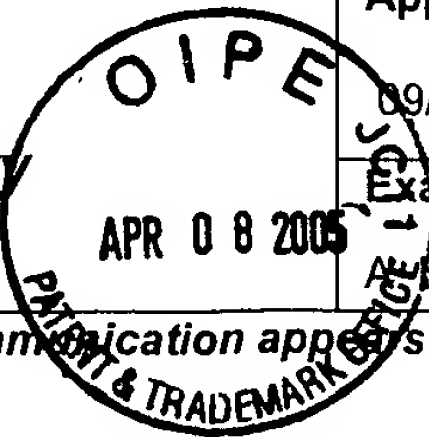
DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED

JUL 29 2004

BRINKS, HOFER,
GILSON & LIONE

Office Action Summary

Application No.

09/884,231

Examiner

At Dexter Tugbang

Applicant(s)

AUERBACH ET AL.

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 28-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-19,28-37 are subject to restriction and/or election requirement.

RECEIVED

JUL 29 2004

BRINKS, HOFER,
GILSON & LIONF**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The applicant(s) amendments filed on 2/6/04 and 5/5/04 have been fully considered and made of record. The amendment has necessitated the following action.

Election/Restrictions

2. This application contains claims directed to the following patentably distinct species of the claimed invention.

Species A, directed to weaving a wrapped thread to serve as part of the weave of the cloth in place of an unwrapped thread, Claim 1;

Species B, directed to weaving the wrapped thread as a flex locus, Claims 2-17 and 19;

Species C, directed to a structural joint, Claim 18;

Species D, directed to weaving a thread wrapped with an electrical conductor into a woven cloth at a single shed or course of the cloth, Claims 28-33; and

Species E, directed to treating a woven cloth with a second substance, Claims 34-37.

It is noted that with respect to each of the independent Claims 1, 2, 18, 28 and 34, the features recited in each group above are mutually exclusive from each other.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there are no generic claims.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable

thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

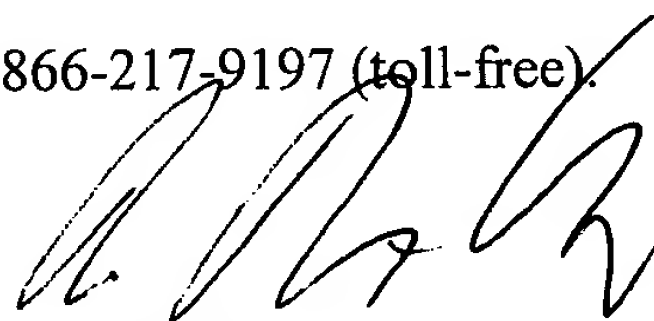
3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

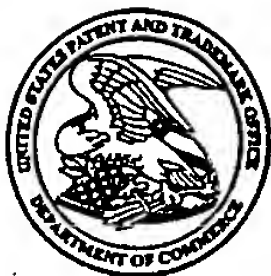
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

July 23, 2004



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,231	06/19/2001	Richard E. Auerbach	1039-68477 112,364/31	5169
27879	7590	01/14/2005	EXAMINER	
INDIANAPOLIS OFFICE 27879 BRINKS HOFER GILSON & LIONE ONE INDIANA SQUARE, SUITE 1600 INDIANAPOLIS, IN 46204-2033			TUGBANG, ANTHONY D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 01/14/2005



Please find below and/or attached an Office communication concerning this application or proceeding.

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JAN 18 2005

BRINKS, HOFER,
GILSON & LIONE

Office Action Summary

Application No.

09/884,231

Examiner

A. Dexter Tugbang

Applicant(s)

AUERBACH ET AL.

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 28-43 is/are pending in the application.
- 4a) Of the above claim(s) 2-19 and 34-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 28-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

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JAN 10 2005

BRINKS, HOFER,
ORSON & LIND

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species D, directed to Claims 28-33 in the reply filed on 11/1/04 is acknowledged. The traversal is on the ground(s) that Claim 1 is generic and therefore, all of Claims 2-19 and 28-43 should be examined. This is not found persuasive because Claims 2, 18 and 34 are not generic claims. First, the examiner agrees with the applicant(s) that amended Claim 1 is now generic and will be examined on the merits. The applicant(s) even admit that Claims 2 and 34 are each subspecies of Claim 1. However, Claim 2 is directed to Species B and Claim 34 is directed to Species E, as well as Claim 18 being directed Species C, as all of this was specified in the previous Office Action (Restriction, dated 7/27/04). Since applicant(s) have elected Species D, then Claims 2-19 and 34-37 are now claims directed to an invention non-elected.

Furthermore, it is noted that newly added Claims 38-43 are directed to different Species as follows:

Claim 38 is drawn to Species A;

Claim 39 is drawn to Species B;

Claims 40-43 are drawn to Species E.

Therefore, Claims 38-43 are directed to an invention non-elected as well.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 2-19 and 34-43 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or

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linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/1/04.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by European Patent EP 0 369 434, referred to hereinafter as EP'434.

EP'434 discloses a method of making a woven spider comprising: selecting a thread (anyone of fibers 11 in Fig. 7A) of a cloth; helically wrapping multiple electrical conductors 12a, 12b around the thread (see Fig. 7A); and weaving the wrapped thread at a selected location in the cloth to serve as part of the weave of the cloth (see Fig. 7C).

5. Claims 1, 28, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Publication JP 5-85196, referred to hereinafter as JP'196.

Regarding Claim(s) 1 and 28, JP'196 discloses a method of making a woven spider comprising: selecting a thread (read as on the flat conductors 29a) of a cloth SH from which the spider is to be woven; helically wrapping an electrical conductor (another one of the flat conductors 29a) around the selected thread; and weaving the wrapped thread with the electrical conductor (woven wrapped threads 29a) at a selected location in the cloth to serve as part of the cloth and to form a single shed of the woven cloth (see Fig. 7 and page 3 of English Translation). It is noted that it is inherent that the electrical conductor is wrapped around the thread based

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upon the criss-cross arrangement of the electrical conductor and thread (two elements of 29a shown in Fig. 7).

Regarding Claim(s) 30, in Figure 7 of JP'196, the portion outlined as 29a is read as the "integral part" of the woven cloth which is considered to be only the selected thread that is wrapped with the electrical conductor.

Regarding Claim(s) 31, JP'196 shows that both the cloth and the wrapped thread with the electrical conductors 29a are bent at a multitude of locations along the cloth (shown in Fig. 5) and anyone of the peaks at each of the bends can be read as the "flex locus".

Claim Rejections - 35 USC § 103

6. Claims 1, 28, 30, 31 and 32, alternatively, are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'196 in view of Sakamoto 5,091,958.

Regarding Claim(s) 1 and 28, if applicant(s) do not believe that JP'196 inherently teaches that the electrical conductor (one 29a) is wrapped around the selected thread (other 29a), then Sakamoto shows that it is well known to provide a thread (one flat conductor) and wrap the thread around an electrical conductor (another flat electrical conductor) by weaving, prior to weaving the wrapped thread within the woven cloth (see col. 3, lines 3-6).

Regarding Claim(s) 30 and 31, JP'196 meets these limitations for the reasons state above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of JP'196 by wrapping the electrical conductor around the selected thread, as taught by Sakamoto, to provide an art recognized equivalent woven cloth used as a spider.

Regarding Claim 32, the examiner takes Official Notice that shaping woven cloths by trimming to form the outer circumference and a central opening is notoriously well known in the art of manufacturing cloths. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified either of the cloths of JP'196 or Sakamoto et al by trimming the cloths for the advantages of achieving a particular shape and opening of the cloth. As evidence of obviousness, see the previously cited references to either Thomas (U. S. Patent 5,408,056, Figure 2) or Roberts (U. S. Patent 3,350,513, Fig. 6, step G).

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'196 in view of Sakamoto as applied to claim 28 above, and further in view of EP'434.

JP'196, as modified by Sakamoto, discloses the claimed manufacturing method as relied upon above. The modified JP'196 method does not teach that the electrical conductor extends beyond an edge of the woven cloth when the woven cloth is molded and trimmed to a desired shape.

EP'434 shows a woven cloth being molded and trimmed to the dimensions of D and W with the wrapped conductor extending beyond and edge of the woven cloth (see Fig. 7C).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of JP'196 by having the electrical conductor extend beyond an edge of the woven cloth during the time that the woven cloth is molded and trimmed, as taught by EP'434, to form somewhat similar shapes of art recognized equivalent woven cloths that are to be subsequently attached to a coil former.

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'196 in view of Sakamoto as applied to claim 28 above, and further in view of Kimura et al 3,841,952.

JP'196, as modified by Sakamoto, discloses the claimed manufacturing method as relied upon above, and further including electrically coupling the electrical conductor to a voice coil wire with a conductive adhesive (solder), applying an adhesive by spraying between the woven spider and a coil former before the conductive adhesive has cured, or hardened, to cover the conductive adhesive and join the woven spider to the coil former (see example on page 27, paragraph 53).

JP'196 does not say whether or not the adhesive that is applied between the woven spider and the coil former is non-conductive, such that it can be called a "non-conductive adhesive".

Kimura shows that non-conductive adhesives of a resin or thermoplastic composition that are sprayed provide excellent fusible bonding characteristics (see col. 4, lines 64+).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the adhesive applied between the woven spider and the coil former of JP'196, by utilizing anyone of the non-conductive adhesive compositions of Kimura, to provide excellent bonding characteristics between the woven spider and the coil former.

Response to Arguments

9. Applicant's arguments filed 2/6/04 have been fully considered but they are not persuasive.

In response to applicant's argument that EP'434 fails to teach that the wrapped thread is at a selected location in the cloth "to serve a part of the weave of the cloth in place of an unwrapped thread", it is noted that the limitation of "in place of an unwrapped thread" is not recited in the rejected claim(s) and therefore, the rejection of EP'434 as applied to Claim 1 is

Art Unit: 3729

maintained. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant(s) arguments with respect to claim 28 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Claim(s) 33, the applicant(s) urge that the solder of JP' 196 cannot be read as a "conductive adhesive". The examiner most respectfully disagrees.

In the English Translation of JP' 196, JP' 196 discusses to the use of solder to connect the electrical conductor to a voice coil wire (see for example, paragraph 53). However, prior to this occurring, which would be prior to the solder being hardened or cured, JP' 196 mentions the use of an adhesive to bond the woven spider to a coil former (see preceding paragraph 52). Albeit JP' 196 does not mention that the adhesive is necessarily a non-conductive adhesive, this is solved by Kimura. So yes, the solder can be read as the "conductive adhesive" because the solder is considered to be a structural joint between the woven spider and the coil former at least to the extent that bonding is required between the electrical conductor and the voice coil wire.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 3729

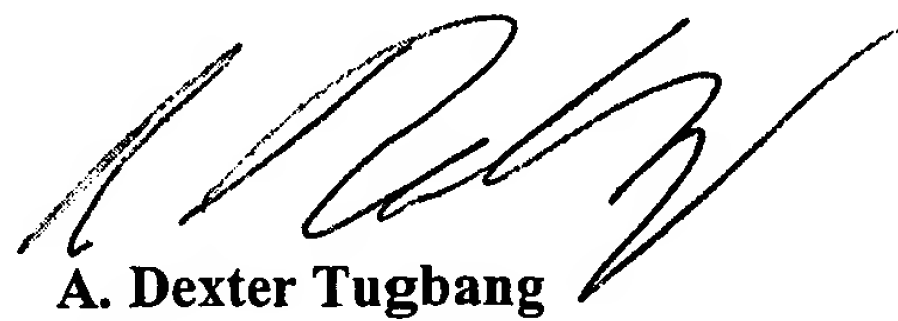
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570.

The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

January 10, 2005

Notice of References Cited

Application/Control No.

09/884,231

Examiner

A. Dexter Tugong

Applicant(s)/Patent Under
Reexamination
AUERBACH ET AL.

Art Unit

3729

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-3,841,952	10-1974	Kimura et al	156/327 x
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.